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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/421,963	10/20/1999	KEVIN L. SCHULTZ	5150-36800	4855
35690	7590	10/20/2004	EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C. P.O. BOX 398 AUSTIN, TX 78767-0398			VO, TUNG T	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/421,963

**Applicant(s)**

SCHULTZ ET AL.

**Examiner**

Tung T. Vo

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8 and 20-22 is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-19 and 23-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/18/04 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 16, 18, and 26 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 9-19, and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sites et al (US 5,515,159) in view of Tao (US 5,533,628).

Re claims 1-4, 9-19, and 23-26, Sites teaches a system and its method for acquiring images of variable sized objects in an image acquisition system, wherein the image acquisition system comprises: an image acquisition device (60 of fig. 1), having a object detector (441 of fig.

2, e.g. the edge position sensor (441) detects the coming edge (presence) of the package (14 of fig. 2)) for physically detecting presence of a first object; an image sensing device (64-1 and 64-2 of fig. 1) generating image data corresponding to the first object; the image acquisition device (60 461 of fig. 1) initiating storage (98 of fig. 6) of the image data corresponding to the first object in response the image acquisition device detecting the presence of the first object (88 of fig. 6); the image acquisition device (60 of fig. 1) having an object detector (46 of fig. 2) physically detecting absence of the image data corresponding to the first object in response to the image acquisition device (col. 4, lines 6-8); the image acquisition device (60 of fig. 1) discontinuing storage (92, 94 of fig. 6) of the image data corresponding to the first object in response to the image acquisition device detecting the absence of the first object (94 of fig. 6, note when the object is absence, there is not detection of the object, the camera is taking the empty or not capturing any object image so the memory (94) instructed by the CPU (92) discontinues to store the object image); a first direct memory access controller (92 of fig. 6) for transferring the image data corresponding to the first object from the on-board memory (94 of fig. 6) to an image buffer in a memory of a computer (86 of fig. 6).

It is noted that Sites suggests that the direction memory access is used in the system for storing the image of the object captured by the camera but Sites does not particularly teach or suggest wherein, prior to image processing, an amount of the store image data substantially corresponds to a size of the first object as claimed.

However, Tao teaches a memory for storing an amount of the store image data substantially corresponds to a size of the first object prior to the image processing (col. 4, lines 58-65, 39 of fig. 2, e.g. the size of the first object is stored in the memory different from the size

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of the second object, and the image data, the sized of the object, is stored prior to performing comparison, processing; particularly, the method includes storing in a memory a first reference pixel count for a first reference object size, a second reference pixel count for a second reference size larger than the first reference object size and a third pixel count for a reference object size smaller than the first reference object size). Therefore, taking the combined teachings of Sites and Tao as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Tao into the system of Sites for automatically recognizing the different sizes of the stored object image before processing. Doing so would reduce time of computation and cost of the system and be more efficient technique for identifying the object in size.

#### ***Allowable Subject Matter***

3. Claims 5-8, 20-22 are allowed.

#### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tonkin (US 4,742,555) discloses a pattern processor controlled illuminator.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tung T. Vo  
Primary Examiner  
Art Unit 2613



TUNG T. VO  
PATENT EXAMINER

T. Vo